## **CLAIMS**

- A mobile transceiver having:
  a system for generation of position information and means for transmitting said position information.
- 2. The invention of Claim 1 wherein said system for generation of position
  information includes means for receiving a signal from a satellite.
- 3. The invention of Claim 2 wherein said system for generation of position information includes means for receiving a Global Positioning System signal.
- 4. The invention of Claim 1 wherein said system for generation of position information includes means for receiving a signal from an airborne platform.
- 5. The invention of Claim 1 wherein said means for transmitting said position information includes a CDMA transmitter.
  - 6. A base station having:
- 2 means for receiving position information from a remote unit and providing a received position signal in response thereto and
- 4 means for directing a beam in response to said received position signal.
- 7. The invention of Claim 6 wherein said position information is provided at least in part by a Global Positioning System.
  - 8. The invention of Claim 7 wherein said remote unit is a mobile transceiver.
- 9. The invention of Claim 8 wherein said mobile transceiver is a CDMA transceiver.

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- 10. The invention of Claim 8 wherein said beam is directed to said transceiver.
- 11. The invention of Claim 6 wherein said means for directing a beam includes a smart antenna.
- 12. The invention of Claim 11 wherein said means for directing a beam includes an antenna array.
- 13. The invention of Claim 12 further including means for driving said arrayto output a directed beam.
- 14. The invention of Claim 13 wherein said means for driving includes a beamforming network.
  - 15. A cellular communications system comprising:
- a mobile transceiver having:

a GPS system for generation of position information and

means for transmitting said position information and

a base station having:

- 6 means for receiving said position information and providing a received position signal in response thereto and
- means located at said base station for directing a beam in response to said received position signal.
  - 16. The invention of Claim 15 wherein said GPS system is GPS assisted.
- 17. The invention of Claim 15 wherein said means for directing a beam includes a smart antenna.
  - 18. The invention of Claim 17 wherein said means for directing a beam

- 2 includes an antenna array.
- 19. The invention of Claim 18 further including means for driving said arrayto output a directed beam.
- 20. The invention of Claim 19 wherein said means for driving includes a beamforming network.
- 21. A method for effecting directional cellular communications including the steps of:

generating position information at a mobile transceiver;

- 4 transmitting said position information;
- means for receiving said position information at a base station and providing a
- 6 received position signal in response thereto; and
- directing a beam from said base station to said mobile transceiver in response
- 8 to said received position signal.